

# COMPLETE SAMPLE DELIVERY GROUP FILE (CSF) EVIDENCE AUDIT CHECKUST

U.S. Environmental Protection Agency - Region 8
Environmental Services Division, Multi-Media Branch
Analytical Operations Section

Audit Number: 08 420/08 Site Name: N	n Hernden 3
Date of Audit: 0/3/08  Audited By: SDG Number: MU24  Resubmitted CSF? Yes No Number of Samples:	R9 16/2/W
Lab Name: Chilmech Consultry CupCLP Lab Code:	
AUDIT CHECKLIST	
1. Custody Seal Present? 2. Condition of Seal? Intact_V Signed_Broken 3. Chain of Custody Record(s) Present? 4. Chain of Custody Record(s) Signed? 5. Chaim of Custody Record(s) Dated? 6. Traffic Report(s) or Packing List(s) Present? 7. Traffic Report(s) or Packing List(s) Signed? 8. Airbill Present? 9. Airbill Number(s): 262782/56// 10. Airbill Signed? 11. Airbill Dated?	Yes No
12. Sample Tags Present?	<del></del>

<u>- 0141- DC - Z</u>	
	; ·
14. Form DC-2 Present?	
15. Numbering Scheme on Form DC-2 Correct?	Yes No
16. Enclosed Documents Listed?	Yes No
17. Listed Documents Enclosed?	Yes_V No
Edd. A.	Yes_\_No
FORM DC-1	
18. Form DC-1 Present?	
19. Form DC-1 Complete?	Yes No
0. Form DC-1 Corrects	YesNo
See comments	Yes_\No
OCUMENT CONTROL	
1. Laboratory Documents Complete?	
2. Laboratory Documents Legible?	YesNo
3. Original Documents Included in CSF?	Yes_\_No
	Yes_\_ No
YTA INSPECTION	
Form I's present (for each analytical fraction	
as defined by the Traffic Report/Chain of Chatago	
Record, 8	
. Forms 2 through 8 (VOC & SVOC), Forms 2 through 10	Yes No
(Metals & Cyanida)	
apresenc:	Yes No
	Yes No
defined by the Traffic Report/Chain of Custody	
record, s	Yes No
refrent Solids form present for soil gamma-	
E: If items 1, 3, 4, 6, 7, 8, 12, 14, 18, or 22 are miss:	
rective action measures must be taken by the CSF auditor amarized below.	ਜ਼ਰ ਜ਼ਬ

IT NUMBER: 08/20/08
MENTS AND NOTES:
Tomplete Sampletag numbers are not listol or
form DC-1
A
Can Bent 01/31/08
itor Date
EPA OFFICIAL SEALS PAGE
ase attach all custody seals below:

Date:

Project:

284 Sheffield St. • Mountainside, NJ 07092 (908) 789-8900 • Fax (908) 789-8922 Signature:

AUDIT NUMBER: 08/20/08	
EDY CTS RIFCLEONIC DIRECTER (	S)
CASE #137093 SEG #: 17H24R9	
SITE NAME: Richardson Hat Tailings	
REM: Kathryn Hernandes	•
DATE: 01/3/108	
ALDINA: Lain Bland	

Audit # 08/20/08
RAS # 37093
STE- Richardson Lints Tally
Rem - Kothum Harnandy
Date - 01/31/08
LAB - CHEM

## USEPA - CLP

# COVER PAGE

Lab Name CHEMTEO	CH CONSULTING GROUP	Contract: EPW06	5047		
Lab Code: CHEM	Case No.: 37093	NRAS No.:	SE	G No.: MH2	4R9
SOW No.: ILM05.4	·	,			
	EPA Sample No.	÷	Lab S	ample ID	
	MH24R9		Y579	99-01	
	MH24S0		Y.579	99-02	
	MH24S1			99-03	
	MH24S1D		Y579	99-04	<del></del>
	MH24S1S		Y579	99-05	<del></del>
	MH24S2			99-06	
•	MH24S3		Y579	99-07	<del></del>
	MH24S4		Y579	99-08	_
	MH24S5		Y579	99-09	
•	MH24S6		Y579	99-10	
^	MH24S9		Y579		
	MH24T0		¥579	99-12	•
·	MH24T1		Y579	99-13	<del></del>
,	MH24T2		Y579	99-14	
	MH24T3		Y579	99-15	<del></del>
	MH24T4		Y579	9-16	<del></del>
	MH24W5		Y579	9-17	
	MH24W6		Y579	9-18	<del></del>
					·············
•					
•					<del></del> .
					•
				ICP-AES	ICP-MS
	CP-MS interelement correction	••	(Yes/No)	YES	
Were ICP-AES and I If yes, were raw dat	CP-MS background corrections generated before	ns applied?	(Yes/No)	<u>YES</u>	<del></del>
application of backs			(Yes/No)	NO	· · · · · · · · · · · · · · · · · · ·
Comments:	ELERG ON BORNEY				
THE "E" QUALL	<u>FIERS ON FORM I AND VI</u>	<u>II FOR POTASSIU</u>	<u>M AND SODIU</u>	<u>M INDICATI</u>	CHEMICAL OR
PHYSICAL	PERFORM WHICH WEED	CLIODE CARD DATE			
INTERFERENCE	EFFECTS, WHICH WERE	SUSPECTED DUE	ang those el	LEMENTS' A	NALYSES ONLY.
					<del></del>
	ackage is in compliance with	the terms and cond	itions of the cont	maat hath taab	minally and fan
completeness, for other	than the conditions detailed	ahove Release of t	he data containe	l in this harde	inically and for
and in the computer-rea	adable data submitted on disk	ette (or via an alteri	iste means of ele	ctronic transm	irrion if approved
in advance by USEPA)	has been authorized by the I	aboratory Manager	or the Manager's	decimee ac	verified by the
following signature.			or and intuingers	- woodenoo, do	volution by the
Signature: 2h.R	show For PH	Name: PARVEEN	HASAN		•
Date: 112105	7	Title: EPA PROJE	CT MANAGER		
				<u>-</u>	<del> </del>

# **CHEMTECH**

284 Sheffield Street Mountainside, NJ 07092

#### **SDG NARRATIVE**

USEPA
SDG # MH24R9
CASE # 37093
CONTRACT # EPW06047
LAB NAME: CHEMTECH CONSULTING GROUP
LAB CODE: CHEM
CHEMTECH PROJECT #Y5799

#### A. Number of Samples and Date of Receipt

1 Water Samples were delivered to the laboratory intact on 10/03/07.

#### **B.** Parameters

Test requested for Metals CLP Full.

#### C. Cooler Temp

Indicator Bottle: <u>Presence/Absence</u> Cooler: 4°C

D. Detail Documentation (related to Sample Handling Shipping, Analytical Problem, Temp of Cooler etc):

#### E. Corrective Action taken for above:

#### F. Analytical Techniques:

All analyses were based on CLP Methodology by method ILM05.4

#### G. Calculation:

For ICP-AES:

Result in Ug/L on Forms = Results in ppm (ICP-AES Raw Data) X 1000

# **CHEMTECH**

284 Sheffield Street Mountainside, NJ 07092

H. QA/QC

Calibrations met requirements. Interference check met requirements. Blank analyses did not indicate any presence of contamination. Laboratory Control sample was within control limits. Spike sample did meet requirements except for Silver. Duplicate sample did meet requirements. Serial Dilution did meet requirements except for Potassium & Sodium.

I certify that the data package is in compliance with the terms and conditions of the contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Signature 2h. Rohau for PH	Name: Parveen Hasan
Date 112/08	Title: Project Manager

# SAMPLE LOG-IN SHEET

ab Name CHEMTE	CH CONSULTING GROU	IP .			·.	Page <u>/</u> of_
Received By (Print	Name) snehat 2	_usail	1/10			Log-in Date <del>12/17/200</del> 7
Received By (Signa	iture)	bour ()	W	· · · · · · · · · · · · · · · · · · ·	· -	12/20/0
Case Number 37	7093	Sample Del	ivery Grou	p No. MH24R9	NRAS Nu	mber
Remarks:				Corres	ponding	
	Present/Absent* Intact/Broken			:		Remarks: Condition of
2. Custody Seal Nos.	N/4-	EPA Sample #	Aqueous Sample pH	Sample Tag #	Assigned Lab #	Sample shipment, etc.
3. Traffic Reports/Chain Of	Present Absent*	MH24R9	42	TAG3383	Y5799-01	
Custody Reports or Packing Lists		\—	-		<del> </del>	1N74-7
	Airbill/Sticker	MH24S0	-	TAG3383	Y5799-02	
4. Airbill	Present Absent*	MH24S1	-	TAG3383	Y5799-03	
5. Airbill No.	862782815611	, MH24S1D	<b>.</b>	TAG3383	Y5799-04	
		MH24S1S	1	TAG3383	Y5799-05	
	Present/Absent*	MH24S2	_} \	TAG3383	Y5799-06	<u> </u>
Sample Tag #	(isted/Not Listed On TR/Chain-of-Custody	MH24S3	]	TAG3383	Y5799-07	
7. Sample Condition	Intact/Broken*/Leaking	MH24S4		TAG3383	Y5799-08	
	Present/Absent*	MH24S5	7	TAG3383	Y5799-09	
Temperature		MH24S6		TAG3383	Y5799-10	
Indicator Bottle	0	MH24S9	1	TAG3383	Y5799-11	
9. Cooler Temperature		MH24T0	┪	TAG3383	Y5799-12	
10. Does information	Yes/No*	MH24T1	7	TAG3383	Y5799-13	
on custody records, traffic		MH24T2	1 \	TAG3383	Y5799-14	
reports, and		MH24T3	┥ \	TAG3383	Y5799-15	
sample tags aggree?		MH24T4	1 1	TAG3383	Y5799-16	
11. Date Received at	12/2/2	MH24W5	1	TAG3383	Y5799-17	
Lab	1-100	MH24W6	- 1	TAG3383	<del></del>	
12. Time Received	121/0	WIN24WO		1AG5363	Y5799-18	
Samp	le Transfer	1	<del></del>			
Fraction	Fraction	1	1			
Area #	Area #20			(40		
Ву	Ву					
00	On					
	attach record of resolu					
Reviewed By 7h.	Kohaui		Logbook N			/
Date 112108			Logbook Pa	age No. / /		

FORM DC-1

ILM05.3

# FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

·				
CASE NO37093	SDG NOM	H24R9		
SDG NOs TO FOLLOW NRAS NO.		· · · · ·		i
140.			_	
CONTRACT NO. <u>EPW06047</u>				
SOW NOILM05.4				
All documents delivered in the Complete SDG File must be o	riginal documents who	ra noosibla (Pafara	nga Eukikis D C	Santian 2.6
The documents derivered in the complete 5170. The intest for the	PAGE	NOs	CHE	
1. Commo Proces	FROM	TO	LAB,	REGION
1. Cover Page	_1_	_1_	<del> </del>	1/
<ol> <li>SDG Narrative</li> <li>Sample Log-In Sheet (DC-1)</li> </ol>		3	<u></u>	<del>V</del>
4. Inventory Sheet (DC-2)	4	_4_	<del>- 1</del>	
5. Traffic Report/Chain of Custody Record(s)	<u>4</u> <u>5</u> 7	6	- <del>- 1</del>	*
o. Trutho report chain of custody record(s)		<u> </u>	-	<del>-V-</del>
Inorganic Analysis				
6. Data Sheet (Form IA-IN)	10	25	J	1/
7. Initial & Continuing Calibration				<del></del>
Verification (Form IIA-IN)	_26	_28_	1	V
8. CRQL Standard	<del></del>	. —		
(Form IIB-IN)	<u> 29</u>	<u>30</u>		1/
9. Blanks (Form III-IN)	_31_	<u>32</u>	<u> </u>	1
10. ICP-AES Interference Check Sample				1
(Form IVA-IN)	33	34		$\underline{V}$
11. ICP-MS Interference Check Sample (Form IVB-IN)	DT / A	NY / A		
12. Matrix Spike Sample Recovery	N/A	<u>N/A</u>		
(Form VA-IN)	35	_35_	٦	) /
13. Post-Digestion Spike Sample Recovery				1/
(Form VB-IN)	36	_36_	J	1
14. Duplicates (Form VI-IN)	37	37	<del>-</del>	1
15. Laboratory Control Sample				
(Form VII-IN)	_38_	38		1
16. ICP-AES and ICP-MS Serial Dilutions				1
(Form VIII-IN)	<u> 39</u>	39		<u> </u>
17. Method Detection Limits (Annually)			,	1/
(Form IX-IN) 18. ICP-AES Interelement Correction Factors	40	<u>41</u> ,	_ <del>_</del>	<u>Y</u> ,
(Quarterly) (Form XA-IN)	AD	43	ا	1/
19. ICP-AES Interelement Correction Factors	42	42	<u></u>	<u>-Y</u>
(Quarterly) (Form XB-IN)	43	46	1	V
20. ICP-AES and ICP-MS Linear Ranges				<u> </u>
(Quarterly) (Form XI-IN)	_47	47	1	W.

FORM DC-2-1

ILM05.4

		E NOs	. <u>СН</u>	ECK
	<u>FROM</u>	TO	<u>LAB</u>	REGION
22. Analysis Run Log (Form XIII-IN)	_ 49	_50	·	V
23. ICP-MS Tune (Form XIV-IN)	- <u>N/A</u>	N/A		<del></del>
24. ICP-MS Internal Standards Relative	* <u>N/A</u>	<u>N/A</u>	-	
Intensity Summary (Form XV-IN)	N/A	NT/A		
25. ICP-AES Raw Data	<u>N/A</u> 51	<u>N/A</u>		<u> </u>
26. GFAA Raw Data (If Applicable)		108	<u></u>	<b>Y</b> .
27. ICP-MS Raw Data	N/A	<u>N/A</u>	-	:
28. Mercury Raw Data	<u>N/A</u>	N/A		
29. Cyanide Raw Data	-	; <del></del>	-	. **
30. Preparation Logs Raw Data	122	124	<del></del>	
31. Percent Solids Determination Log	133	134		1
32. USEPA Shipping/Receiving Documents	<u></u>	·		<u> </u>
Airbill (No. of Shipments 01)	_135	125		1/
Sample Tags (In a Plastic Bag w/ Page #)		<u>135</u>	<del></del>	<u> </u>
	144	144	<u></u>	
Sample Log-In Sheet (Lab)  33. Misc, Shipping/Receiving Records	<u>136</u>	139		<i>×</i>
(list all individual records)				
Telephone Logs	27/2	27.1		
PE Instruction Page	N/A	<u>N/A</u>		. ——
Modified Analysis Page				
34. Internal Lab Sample Transfer Records &		<u></u>	<u> </u>	. —
Tracking Sheets (describe or list)			*	
- · · · · · · · · · · · · · · · · · · ·	. 440		, .	1
Internal Lab COC	140	141	<del></del>	<u>~</u> /
Lab Chronicle 35. Internal Original Sample Prep &	142	143	<u> </u>	₩
		•	•	<b>V</b> ,
Analysis Records (describe or list)				
Prep Records	*	· ·	<del></del>	
	<del></del>	***	<del></del>	<del></del>
Description  36. Other Records (describe or list)				<del></del>
Telephone Communications Log	•			
STD Certification/ Traceability & Log Page	100	120		
SID Certification Traceuotaty & Log Page	109	132	<u> </u>	
37. Comments:	•			
		- · · · · · · · · · · · · · · · · · · ·	, <del></del>	
	· · · · · · · · · · · · · · · · · · ·			
Commissed Des				
Completed By:	·	<u> </u>		. 65
(CLP Lab) Zh. Kohan for Ph Pavee (Print N	n Hasan, Proje Vame & Title)	ect Manager	<u>la</u>	10 g
	vanite of 1 me)		(Date	<b>;</b> )
Audited By: / // // //	1/1	(20 - 1)	<b>.</b>	/ / ~
(USEPA)	CML V	De Cont	0//	3/10/
(Signature) (Print N	lame & Title)	/	(Date	
	•		•	•

FORM DC-2-2

ILM05.4

# Sample Delivery Group (SDG) Cover Sheet

SDG Number: MH24R9

·	ICP-AES Analysis						
Laboratory Name: CHEMTECH			aboratory Code:	CHEM			
Contract No.	EPWIINIA/			Case No.	<u>37093</u>		
Analysis Price			S	DG Turnarou	ınd	14 days	
<b>Modified Anal</b>	ysis (if ap	plicable):				<b>/</b>	
Modification	Reference	No:	IA				
	USEPA	Sample Num	bers in Sl	OG (Listed in	Numerical	Order)	
MH24R9		MH24S0		MH24S1		MH24S1D	
MH24S1S		MH24S2		MH24S3		MH24S4	
MH24S5		MH24S6		MH24S9		MH24T0	
MH24T1		MH24T2		MH24T3		MH24T4	
MH24W5	1	MH24W6					
	,						
First Sample i	n SDG				Last Sample	e in SDG	
MH24R9					MH24W6		
					*	e Receipt Date	
12/20/2007 3	3:10:00 PN	1		12/20/2007 3:10:00 PM			
Note: There are a maximum of 20 field samples (excluding PE samples) in an SDG.  Attach TR/COC Records to this form in alphanumeric order (the order listed above on this form).  Signature							

-		 	
-			ě.
200.00			
	_		e
		_	-
-			-
-		-	-

**USEPA Contract Laboratory Program Inorganic Traffic Report & Chain of Custody Record** 

3

37093 Case No:

DAS No: SDG No:

Date Shipped:

Carrier Name:

FedEx

Shipped to: ChemTech Consulting Group (CHEMED) 284 Sheffield Street

Mountainside NJ 07092 (908) 789-8900

**Chain of Custody Record** Sampler Signature: (Date / Time) Relinguished By Received By

For Lab Use Only

**Lab Contract No:** 

Unit Price:

Transfer To:

Lab Contract No:

Linit Drice:

Ļ						Unit Price:				
	INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE Bottles	STATION LOCATION	SAMPLE COLLE DATE/TIME	ECT	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
_	WH24R9	Surface Water/ Chris Hayes	₩G	DM (14)	TAG338303 (1)	SW-2	S: 12/17/2007	12:00	200 - 7 (Marinto Mir do 15 )	
	MH24S0	Surface Water/ Chris Hayes	M/G	TM (14)	TAG338304 (1)	SW-2	S: 12/17/2007	12:00		
\	MH24S1	Surface Water/ Chris Hayes	M/G	DM (14)	TAG338305 (1)	SW-3	S: 12/17/2007	12:00		
	MH24S2	Surface Water/ Chris Hayes	M/G	TM (14)	TAG338306 (1)	SW-3	S: 12/17/2007	12:00		
,	MH24S3	Surface Water/ Chris Hayes	M/G	DM (14)	TAG338307 (1)	SW-4	S: 12/17/2007	12:00		
\	MH24\$4	Surface Water/ Chris Hayes	M/G	TM (14)	TAG338308 (1)	SW-4	S: 12/17/2007	12:00		
Ì	MH24S5	Surface Water/ Chris Hayes	M/G	DM (14)	TAG338309 (1)	SW-5	S: 12/17/2007	12:00		
`	MH24\$6	Surface Water/ Chris Hayes	M/G	TM (14)	TAG338310 (1)	<b>SW-5</b>	S: 12/17/2007	12:00		
	MH24S9	Surface Water/ Chris Hayes	M/G	DM (14)	TAG338313 (1)	SW-7	S: 12/17/2007	12:00		
	\MH24T0	Surface Water/ Chris Hayes	M/G	TM (14)	TAG338314 (1)	SW-7	S: 12/17/2007	12:00		

Complete?Y	Sample(s) to be used for laboratory QC: MH24S1, MH24S2	7 7 7	Cooler Temperature Upon Receipt:	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	:	Custody Seal Intact?
DM = CLP TAL Dissolve	d Metals, TM = CLP TAL Total Metals			

TR Number: 8-065602925-121907-0002 **LABORATORY CO** 

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, 15000 Conference Center Dr., Chantilly, VA. 20151-3819 Phone 703/818-4200; Fax 703/818-4602

F2V5.1.047 Page 1 of 2

			:
V	17	Н	L

Date Shipped:

Carrier Name:

Airbill:

Shipped to:

FedEx

ChemTech Consulting

Group (CHEMED)

284 Sheffield Street Mountainside NJ 07092

**USEPA Contract Laboratory Program Inorganic Traffic Report & Chain of Custody Record** 

**Chain of Custody Record** 

Relinquished By

2

3

37093 Case No:

DAS No: SDG No:

For Lab Use Only

Lab Contract No:

Unit Price:

EPITA

12/20/04

Transfer To:

	(908) 789-8900						.ab Contract No:	
			4			U	Jnit Price:	
INORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME	ORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
MH24T1	Surface Water/ Chris Hayes	M/G	DM (14)	TAG338315 (1)	SW-8	S: 12/17/2007 1	12:00	
MH24T2	Surface Water/ Chris Hayes	M/G	TM (14)	TAG338316 (1)	SW-8	S: 12/17/2007 1	12:00	
MH24T3	Surface Water/ Chris Hayes	M/G	DM (14)	TAG338317 (1)	\$W-9	S: 12/17/2007 1	12:00	
MH24T4	Surface Water/ Chris Hayes	M/G	TM (14)	TAG338318 (1)	SW-9	S: 12/17/2007 1	12:00	
MH24W5	Surface Water/ Chris Hayes	M/G	DM (14)	TAG338329 (1)	SW-15	S: 12/17/2007 1	12:00	
MH24W6	Surface Water/ Chris Haves	M/G	TM (14)	TAG338330 (1)	SW-15	S: 12/17/2007 1	12:00	,

Sampler

(Date / Time)

Signature:

Received By

	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):		Chain of Custody Seal Number:	
Complete?Y	MH24S1, MH24S2		Upon Receipt: 4°C	NIA	_
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? Shipment Iced?	Z
DM = CLP TAL Dissolved Metals, TM = CLP TAL Total Metals					

TR Number: 8-065602925-121907-0002 LABORATORY

#### **USEPA - CLP**

### 1A-IN INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH24R9

	•	MH24R9
Lab Name CHEMTECH CONSULTING GROUP Co	ontract; EPW06047	
Lab Code: <u>CHEM</u> Case No.: <u>37093</u> NI	RAS No.:	SDG No.: MH24R9
Matrix: (soil/water) WATER	Lab Sample ID: <u>Y5799-01</u>	:
Level: (low/med) LOW	Date Received: 12/20/2007	7
% Solids: 0.0		
Concentration Units (ug/Laor mg/kg dry weight): UG/L		

CAS No.	Analyte	Concentration	C	Q	Ŋ
7429-90-5	Aluminum	20.6	J		T
7440-36-0	Antimony	11.6	J		1
7440-38-2	Arsenic	17.1			T j
7440-39-3	Barium	92.2	J		
7440-41-7	Beryllium	0.17	J		
7440-43-9	Cadmium	1.8	J		j
7440-70-2	Calcium	308000			1
7440-47-3	Chromium	10.0	U		_   I
7440-48-4	Cobalt	50.0	U		
7440-50-8	Copper	2.2	J		I
7439-89-6	Iron	1650			I
7439-92-1	Lead	19.8			1
7439-95-4	Magnesium	73200			<b> </b>
7439-96-5	Manganese	4070			
7439-97-6	Mercury				N
7440-02-0	Nickel	2.4	J		F
7440-09-7	Potassium	3600	J	Е	F
7782-49-2	Selenium	35.0	U		F
7440-22-4	Silver	10.0	U	N	F
7440-23-5	Sodium	127000		Е	F
7440-28-0	Thallium	25.0	U		I
7440-62-2	Vanadium	50.0	U	,	Ť
7440-66-6	Zinc	1010			F
57-12-5	Cyanide			· · · · · · · · · · · · · · · · · · ·	N.
· · · · · · · · · · · · · · · · · · ·					
					$\Box$

Color Before; COLORLESS	Clarity Before: <u>CLEAR</u>	Texture:	
Color After: COLORLESS	Clarity After: CLEAR	Artifacts:	
Comments:			
4747			
		· · · · · · · · · · · · · · · · · · ·	